

CLAIMS

What is claimed is:

1. A hand-held, stereoscopic optical viewing device comprising:
 - a) at least one (1) pair of refracting telescopes having an objective lens and eyepiece mounted on a frame;
 - b) an embedded stereoscopic imaging system having an image detector; and
 - c) a focusing mechanism which simultaneously focuses the images to the eyepiece and said embedded stereoscopic imaging system.
- 10 2. A hand-held, stereoscopic optical viewing device of claim 1 wherein said device is a 3-dimensional imaging system.
3. A hand-held, stereoscopic optical viewing device of claim 1 wherein said device is a binocular.
4. A hand-held, stereoscopic optical viewing device of claim 1 wherein said 15 image detector comprises a CMOS photo array.
5. A hand-held, stereoscopic optical viewing device of claim 1 wherein said image detector comprises a charge coupled device ("CCD").
6. A hand-held, stereoscopic optical viewing devices of claim 1 wherein said image detector comprises an optical sensor.
- 20 7. A hand-held stereoscopic system, comprising:
 - a) an optical viewing system having an objective lens, prism and eyepiece with an optical path defined therein;

b) an embedded imaging system having an optical sensor to record images from said optical path;

c) a movable objective lens which simultaneously adjusts the focal length of (a) of the optical viewing system and (b) of the embedded imaging system.

5 8. A hand-held stereoscopic system of claim 8 wherein said system is an optical viewing device.

9. A hand-held stereoscopic system of claim 8 wherein said system is a 3-dimensional imaging system.

10 10. A hand-held stereoscopic system of claim 8 wherein said system is a binocular.

11. A hand-held stereoscopic system of claim 8 wherein said objective lens is adjustable.

12. A hand-held stereoscopic system of claim 8 wherein said focal length is the field of view.

15 13. A hand-held stereoscopic system of claim 8 wherein said movable objective lens may be adjusted either manually or automatically.

14. A method for simultaneously focusing the optical viewing system and the embedded imaging system in a hand-held stereoscopic system wherein:

20 a) said optical viewing system is comprised of an objective lens, prism and eyepiece; and

b) said embedded imaging system is comprised of an optical sensor and imaging optics to record images.

15. A method of claim 15 wherein the objective lens may be adjusted either manually or automatically.